REMARKS

Claims 1, 7, and 16 have been amended. Claims 1-24 and 49 are present in the application. In view of the foregoing amendments and remarks that follow, Applicants respectfully request reconsideration.

Patentability of Claim 19

The Office Action does not specifically state that Claim 19 is allowable over the art of record, but it is noted that the Office Action does not reject Claim 19 in view of the art of record. Therefore, in the absence of any art rejection, it is respectfully submitted that Claim 19 should now be in proper condition for allowance, and notice to that effect is respectfully requested.

Drawing Objections

On page 2 of the present Office Action, the Examiner objects to the drawings under 37 CFR 1.83(a), asserting that the drawings fail to show certain features recited in the claims. Specifically, the Examiner asserts that the drawings fail to show the shapes which reflect the claimed integer values in Claims 22-24. Applicants respectfully disagree.

First, Claims 22 and 24 include a recitation of "wherein m of each said m-sided regular polygon is at least equal to 8." Applicants respectfully submit that Figure 2 does in fact depict a portion of a m-sided regular polygon wherein m is at least equal to 8. More specifically, Applicants' specification states in paragraph [0020] that "the corner angle of a regular polygon of m sides is 180(1-2/m) degrees." As such, when m is equal to 8, the corner angle of a regular polygon is 135 degrees. In paragraph [0015], the specification states that "[w]hen the angles of the corners 8 and 10 [in Figure 2] are equal they are 135 degrees" (emphasis added). Thus, Figure 2 illustrates the recitations in Claims 22 and 24 of "wherein m of each said m-sided regular polygon is at least equal to 8," and there is no basis for the assertion that the drawings do not depict the claimed integer values of Claims 22 and 24.

Second, Claim 23 includes a recitation of "wherein m of each said m-sided regular polygon is at least equal to 16." Applicants respectfully submit that Figure 3 does in fact depict a portion of a m-sided regular polygon wherein m is at least equal to 16. Using the equation from paragraph [0020] referenced above, when m is equal to 16, the corner angle of a regular polygon is 157.5 degrees. In paragraph [0018], the specification states that "the angles of corners 12, 14, 16, and 18 [in Figure 3] are about 157.5 degrees in equal angle double clipped corner embodiments (emphasis added)." And paragraph [0020] even explicitly states that "the corner angle of double clipped corner embodiments [of Figure 3], 157.5 degrees, is attained for an m=16 polygon" (emphasis added). Thus, Figure 3 illustrates the recitations in Claim 23 of "wherein m of each said m-sided regular polygon is at least equal to 16," and there is no basis for the assertion that the drawings do not depict shapes which reflect the claimed integer values of Claim 23.

For the foregoing reasons, it is respectfully submitted that there is no merit to the assertions that the drawings do not show shapes which reflect the claimed integer values of Claims 22-24. Accordingly, it is respectfully submitted that these drawing objections are without merit, and thus should be withdrawn.

Claim Objections

On page 3 of the present Office Action, the Examiner objects to Claims 1, 7, and 16, asserting that they are incomplete sentences and grammatically ambiguous. Also, the Examiner asserts that the preamble of Claim 1 does not follow the conventional nomenclature in the art. Claims 1, 7, and 16 have been amended using the Examiner's suggested language. The forgoing amendments do not introduce any new matter and have been made solely to correct grammatical inconsistencies.

Independent Claim 1

Independent Claim 1 stands rejected under 35 U.S.C. §102 as anticipated by Harada U.S.

Patent Application Publication No. 2002/0005583. This ground of rejection is respectfully traversed. Independent Claim 1 recites:

> metallic features imbedded in dielectric layers, wherein corner angles of all corners of the metallic features are greater than 90 degrees. (Emphasis added).

On page 4 of the present Office Action, the Examiner asserts that the semiconductor device disclosed in Figures 36A-36B of Harada meets all the limitations of Claim 1. However, the portions of Harada relied upon by the Examiner do not disclose metallic features with "corner angles of all corners . . . greater than 90 degrees (emphasis added)," as recited by Claim 1. In more detail, the Examiner asserts that all internal angles of features 101 and 250 are greater than 90°. But Figure 36A clearly shows that not all internal angles of feature 101 are greater than 90°. Specifically, the rectangular portion extending from the left side of feature 101 contains internal angles that are not greater than 90°. Further, the L-shaped metallic feature (no reference numeral) in Figure 36A also has corners that are not greater than 90°.

Accordingly, it is respectfully submitted that the indicated portions of Harada do not disclose each and every limitation recited in Claim 1, and therefore do not meet the legal requirements for anticipation under §102, as summarized in MPEP §2131. Consequently, Claim 1 is believed to be allowable, and notice to that effect is respectfully requested.

Independent Claim 7

Independent Claim 7 stands rejected under 35 U.S.C. §102 as anticipated by Harada. This ground of rejection is respectfully traversed, for the following reasons. Applicants' Claim 7 includes a recitation of:

> metallic features imbedded in dielectric layers, which

> wherein corners of all metallic features are formed in n-fold clipped corner configurations, with n being greater than 0.
> (Emphasis added).

On page 5 of the present Office Action, the Examiner asserts that semiconductor device disclosed in Figures 36A-36B of Harada meets all the limitations of Claim 7. However, the device in Figure 36A of Harada has multiple metallic features with 90° corners that are **not** clipped. As evident from the claim limitations quoted above, Claim 7 requires that the corners of **all** metallic features embedded in dielectric layers be n-fold clipped corner configurations, where n is greater than 0. But this is not the case with the device shown in Figure 36A of Harada, due to the fact that feature 101 and the adjacent L-shaped feature each such have 90° corners that are not clipped. For example, the rectangular portion extending from the left side of feature the 101 has 90° corners that are not clipped. Accordingly, Figure 36A of Harada does not disclose everything recited in Claim 7, and therefore does not meet the legal requirements for anticipation, as summarized in MPEP §2131. Claim 7 is therefore believed to be allowable over the indicated portions of Harada, and notice to that effect is respectfully requested.

Independent Claim 16

Independent Claim 16 stands rejected under 35 U.S.C. §102 as anticipated by Harada. This ground of rejection is respectfully traversed, for the following reasons. Applicants' Claim 16 includes recitations of:

> shapes of all metallic features imbedded in dielectric layers, that could be formed as squares, are instead configured as m-sided regular polygons, where m is greater than 4. (Emphasis added).

On page 6 of the present Office Action, the Examiner asserts that semiconductor device disclosed in Figures 36A-36B of Harada meets all the limitations of Claim 16. However, the device in Figure 36A of Harada has a metallic feature 101 that is **not** an m-sided regular polygon, where m is greater than 4. Specifically, the feature 101 has a rectangular protrusion on its left side that prevents it from being a regular polygon (i.e. all angles are equal). Figure 36A of Harada thus does not disclose everything recited in Claim 16, and therefore does not meet the legal requirements for anticipation, as summarized in MPEP §2131. Claim 16 is therefore believed to be allowable over the indicated portions of Harada, and notice to that effect is respectfully requested.

Dependent Claims

Claims 2-6 and 49, Claims 8-15, and Claims 17-24 respectively depend from Claim 1, Claim 7, and Claim 16, and are also believed to be patentable, for example for the same reasons discussed above with respect to Claims 1, 7 and 16, respectively.

Conclusion

Based on the foregoing, it is respectfully submitted that all of the pending claims are fully allowable, and favorable reconsideration of this application is therefore respectfully requested. If the Examiner believes that examination of the present application may be advanced in any way by a telephone conference, the Examiner is invited to telephone the undersigned attorney at 972-739-8635.

Although Applicants believe that no fee is due in association with the filing of this Response, the Commissioner is hereby authorized to charge any additional fee required by this paper, or to credit any overpayment, to Deposit Account No. 08-1394 of Haynes and Boone LLP

Respectfully submitted,

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